## **AMENDMENTS TO THE CLAIMS**

Please make amendments to the claims as follows:

 $\int_{\mathbb{R}^{n}}$ 

1. (Currently Amended) A method for an enterprise system to evaluate and rank exact and probabilistic search rules for searching a computer database of records according to an efficiency measure of each search rule, comprising the steps of:

implementing a plurality of search rules that include one or more data elements, wherein a combination of data elements in each rule is configured to identify a target record;

arranging the search rules in a rank order of execution;

executing the search rules according to the rank order to retrieve the target record;

retrieving a plurality of records identified by the search rules as possible matches to the target record;

collecting a plurality of <u>counts</u> statistical values related to the <u>probability</u> performance of each search rule <u>locating</u> executed in attempt to <u>locate</u> the target record; and

calculating a probability for each search rule locating the target record; an efficiency measure for each search rule using the collected values, where the efficiency measure measures how efficient a corresponding search rule is in finding a match with the target record; and

<u>arranging</u> adjusting the rank order of the search rules <u>in an order</u> based on the <u>efficiency</u> measure <u>probability</u> for each search rule; <u>and</u>

executing the search rules according to the order to retrieve the target record.

2. (Currently Amended) The method of claim 1, wherein one of the collected statistical values counts corresponds to a number of instances that a search rule is executed to search for the target record.

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- 3. (Currently Amended) The method of claim 1, wherein one of the collected statistical values counts corresponds to a number of instances that a search rule retrieves one or more records as possible matches to the target record.
- 4. (Currently Amended) The method of claim 1, wherein one of the collected statistical values counts corresponds to an elapsed time value equivalent to an amount of time spent executing a search rule to retrieve a record.
- 5. (Currently Amended) The method of claim 1, wherein one of the collected statistical values counts corresponds to a number of instances that a search rule retrieves a record previously retrieved by a previously executed search rule.
- 6. (Currently Amended) The method of claim 1, wherein one of the collected statistical values counts corresponds to a number of instances that a search rule retrieves a record that was not retrieved by a previously executed search rule.
- 7. (Currently Amended) The method of claim 1, wherein one of the collected statistical values counts corresponds to a number of instances that a search rule retrieves a plurality of records, wherein the plurality of records are subsequently determined to correspond to the target record.
- 8. (Currently Amended) The method of claim 1, wherein one of the collected statistical values counts corresponds to the number of records of the plurality of retrieved records determined not to be the target record.

9. (Currently Amended) The method of claim 1, wherein the enterprise system determines the efficiency for each search rule according to the collected statistics for the search rule, and wherein the rank order of the search rules are arranged in order is descending order by efficiency the probability.

## 10.-11. (Canceled)

12. (Currently Amended) A computer readable medium having a program for evaluating and ranking exact and probabilistic search rules, the program comprising logic configured to perform the steps of:

implementing a plurality of search rules that include one or more data elements, wherein the combination of data elements in each rule is configured to identify a target record;

arranging the search rules in a rank order of execution;

executing the search rules according to the rank order to retrieve the target record;
retrieving a plurality of records identified by the search rules as possible matches to the target record;

collecting a plurality of <u>counts</u> statistical values related to the <u>probability performance</u> of each search rule <u>locating executed in attempt to locate</u> the target record; and

calculating a probability for each search rule locating the target record; an efficiency measure for each search rule using the collected values, where the efficiency measure measures how efficient a corresponding search rule is in finding a match with the target record; and

<u>arranging</u> adjusting the rank order of the search rules <u>in an order</u> based on the <u>efficiency</u> measure <u>probability</u> for each search rule; <u>and</u>

executing the search rules according to the order to retrieve the target record.

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- 13. (Currently Amended) The system of claim 12, wherein one of the collected statistical values counts corresponds to a number of instances a that search rule is executed to search for the target record.
- 14. (Currently Amended) The system of claim 12, wherein one of the collected statistical values counts corresponds to a number of instances that a search rule retrieves one or more records as possible matches to the target record.
- 15. (Currently Amended) The system of claim 12, wherein one of the collected statistical values counts corresponds to an elapsed time value equivalent to an amount of time spent executing a search rule to retrieve a record.
- 16. (Currently Amended) The system of claim 12, wherein one of the collected statistical values counts corresponds to a number of instances that a search rule retrieves a record previously retrieved by a previously executed search rule.
- 17. (Currently Amended) The system of claim 12, wherein one of the collected statistical values counts corresponds to a number of instances that a search rule retrieves a record that was not retrieved by a previously executed search rule.
- 18. (Currently Amended) The system of claim 12, wherein one of the collected statistical values counts corresponds to a number of instances that a search rule retrieves a plurality of records, wherein the plurality of records are subsequently determined to correspond to the target record.

- 19. (Currently Amended) The system of claim 12, wherein one of the collected statistical values counts corresponds to the number of records of the plurality of retrieved records determined not to be the target record.
- 20. (Currently Amended) The system of claim 12, wherein the enterprise system determines the efficiency for each search rule according to the collected statistics for the search rule, and wherein the rank order of the search rules are arranged in order is descending order by efficiency the probability.
  - 21-40. (Canceled)
- 41. (Currently Amended) The method of claim 1, where calculating an efficiency measure a probability further comprises calculating a percentage of rule firings in which a corresponding search rule finds a possible match.
- 42. (Currently Amended) The method of claim 1, where calculating an efficiency measure a probability further comprises calculating a percentage of possible matches found by a rule that are determined to be actual matches.
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- 43. (New) The program of claim 12, where calculating a probability further comprises calculating a percentage of rule firings in which a corresponding search rule finds a possible match.
- 44. (New) The program of claim 12, where calculating a probability further comprises calculating a percentage of possible matches found by a rule that are determined to be actual matches.

45. (New) A method for an enterprise system to evaluate and rank probabilistic search rules for searching a computer database of records, comprising the steps of:

implementing a plurality of search rules that include one or more data elements, wherein a combination of data elements in each rule is configured to identify a target record;

calculating a probability, for each search rule, that the search rule will locate the target record; and

arranging the search rules in an order based on the probability for each search rule.

- 46. (New) The method of claim 45, further comprising: executing the search rules according to the order to retrieve the target record.
- 47. (New) The method of claim 45, where the step of calculating further comprises: retrieving a plurality of records identified by the search rules as possible matches to the target record; and

collecting a plurality of counts, each count related to the probability of a search rule locating the target record.

48. (New) A computer readable medium having a program for evaluating and ranking probabilistic search rules, the program comprising logic configured to perform the steps of:

implementing a plurality of search rules that include one or more data elements, wherein a combination of data elements in each rule is configured to identify a target record;

calculating a probability, for each search rule, that the search rule will locate the target record; and

arranging the search rules in an order based on the probability for each search rule.

49. (New) The program of claim 48, further comprising logic configured to perform the step of:

executing the search rules according to the order to retrieve the target record.

50. (New) The program of claim 48, where the logic configured to perform the step of calculating further comprises logic configured to perform the steps of:

retrieving a plurality of records identified by the search rules as possible matches to the target record; and

collecting a plurality of counts, each count related to the probability of a search rule locating the target record.